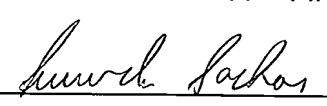


|  |   |   |
|--|---|---|
| FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE   |   | ATTORNEY'S DOCKET NUMBER<br><b>292164US0PCT</b>                     |
| <b>TRANSMITTAL LETTER TO THE UNITED STATES</b><br><b>DESIGNATED/ELECTED OFFICE (DO/EO/US)</b><br><b>CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>  |   | U.S. APPLICATION NO. (If known, see 37 CFR 1.5)<br><b>10/583723</b> |
| INTERNATIONAL APPLICATION NO.<br><b>PCT/EP04/13564</b>   | INTERNATIONAL FILING DATE<br><b>November 30, 2004</b> | PRIORITY DATE CLAIMED<br><b>December 20, 2003</b>                   |
| TITLE OF INVENTION<br><b>ALUMINIUM OXIDE POWDER PRODUCED BY FLAME HYDROLYSIS AND HAVING A LARGE SURFACE AREA</b>   |   |   |
| APPLICANT(S) FOR DO/EO/US<br><b>Kai SCHUMACHER, et al.</b>   |   |   |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:  |   |   |
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> If the declaration is in a language other than the English language, it is accompanied by an English translation. The translation is accurate (37 CFR 1.69)</li> </ol> </li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).</li> <li>11. <input type="checkbox"/> A copy of the International Preliminary Examination Report (PCT/IPEA/409).</li> <li>12. <input checked="" type="checkbox"/> A copy of the International Search Report (PCT/ISA/210).</li> </ol> <p style="margin-left: 20px;"><b>Items 13 to 23 below concern document(s) or information included:</b></p> <ol style="list-style-type: none"> <li>13. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> PTO-1449    b. <input checked="" type="checkbox"/> Cited References 9    c. <input type="checkbox"/> Statement of Relevancy    d. <input type="checkbox"/> List of Related Cases.</li> </ol> </li> <li>14. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>15. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</li> <li>16. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</li> <li>17. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>18. <input type="checkbox"/> A substitute specification.</li> <li>19. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>20. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.</li> <li>21. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</li> <li>22. <input type="checkbox"/> A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).</li> <li>23. <input checked="" type="checkbox"/> Other items or information: Notice of Priority, PCT/IB/304, PCT/IB/308, Copy of Declaration of Inventorship under PCT Rule 4.17</li> </ol> |   |   |

10/20/2003 JUN 2003

|   |              |  |  |   |        |
|---|--------------|--|--|---|--------|
| U.S. APPLICATION NO. (If known, see 37 CFR 1.5)<br><b>10/583723</b>   |              | INTERNATIONAL APPLICATION NO.<br><b>PCT/EP04/13564</b>                 |  | ATTORNEY'S DOCKET NUMBER<br><b>292164US0PCT</b> |        |
| The following fees are submitted:   |              |  |  | <b>CALCULATIONS</b> <b>PTO USE ONLY</b>         |        |
| 24. <input checked="" type="checkbox"/> Basic national fee..... \$300   |              |  |  | \$300.00  |        |
| 25. <input checked="" type="checkbox"/> Examination fee<br>If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .... \$0<br>All other situations..... \$200   |              |  |  | \$200.00  |        |
| 26. <input checked="" type="checkbox"/> Search fee<br>If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)..... \$0<br>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority..... \$100<br>International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB ..... \$400<br>All other situations..... \$500 |              |  |  | \$400.00  |        |
| <b>TOTAL OF 24, 25 AND 26 =</b>   |              |  |  | \$900.00  |        |
| <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  |              |  |  |   |        |
| Total Sheets  | Extra Sheets | Number of each additional 50 or fraction thereof (round up to a whole) |  | RATE  |        |
| - 100 =   | 0 / 50 =     | 0  |  | x \$250.00                                      | \$0.00 |
| <input type="checkbox"/> Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).  |              |  |  | \$0.00  |        |
| CLAIMS  |              | NUMBER FILED   | NUMBER EXTRA   | RATE  |        |
| Total claims  | 18           | - 20 =   | 0  | x \$50.00                                       | \$0.00 |
| Independent claims  | 1            | - 3 =  | 0  | x \$200.00                                      | \$0.00 |
| MULTIPLE DEPENDENT CLAIMS (if applicable)   |              | <input type="checkbox"/> +   |  | \$360.00  | \$0.00 |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>  |              |  |  | \$900.00  |        |
| <input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.  |              |  |  | \$0.00  |        |
| <b>SUBTOTAL =</b>   |              |  |  | \$900.00  |        |
| <input type="checkbox"/> Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  |              |  |  | \$0.00  |        |
| <b>TOTAL NATIONAL FEE =</b>   |              |  |  | \$900.00  |        |
| <input type="checkbox"/> Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +   |              |  |  | \$0.00  |        |
| <input type="checkbox"/> Petition fee of \$1,500.00 for Petition to Revive (37 CFR 1.137 (b)).  |              |  |  | \$0.00  |        |
| <b>TOTAL FEES ENCLOSED =</b>  |              |  |  | \$900.00  |        |
|   |              |  |  | Amount to be refunded:                          | \$     |
|   |              |  |  | Amount to be charged:                           | \$     |
| a. <input type="checkbox"/> A check in the amount of \$_____ to cover the above fees is enclosed.   |              |  |  |   |        |
| b. <input type="checkbox"/> Please charge my Deposit Account No. <u>15-0030</u> in the amount of \$_____ to cover the above fees.   |              |  |  |   |        |
| c. <input checked="" type="checkbox"/> The Director is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>15-0030</u> . A duplicate copy of this sheet is enclosed.   |              |  |  |   |        |
| d. <input checked="" type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.   |              |  |  |   |        |
| <b>NOTE:</b> Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.   |              |  |  |   |        |
| SEND ALL CORRESPONDENCE TO:   |              |  |  |   |        |
| CUSTOMER NUMBER<br><b>22850</b>   |              |  | SIGNATURE<br> |   |        |
| Tel. (703) 413-3000<br>Fax. (703) 413-2220<br>(OSMMN 1/06)  |              |  | NAME<br><b>Norman F. Oblon</b><br><b>24,618</b><br>REGISTRATION NUMBER                             |   |        |
|   |              |  | Surinder Sachar<br>Registration No. 34,423   |   |        |

10/383723

Docket No. 292164US0PCT

IN RE APPLICATION OF: Kai SCHUMACHER, et al.

1AP20 RECEIVED TO 20 JUN 2005

SERIAL NO: NEW U.S. PCT APPLICATION (based on PCT/EP04/13564)

FILED: HEREWITH

FOR: ALUMINIUM OXIDE POWDER PRODUCED BY FLAME HYDROLYSIS AND HAVING A LARGE SURFACE AREA

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Transmitted herewith is an amendment in the above-identified application.

- ☐ No additional fee is required
- ☐ Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.
- ☒ Additional documents filed herewith: Application Data Sheet/Notice of Priority/Credit Card Payment Form for \$900.00  
PCT Transmittal Letter/Preliminary Amendment/PCT/IB/304/PCT/IB/308  
Information Disclosure Statement/PTO-1449/Cited References (9)  
International Search Report/Copy of Declaration of Inventorship under PCT Rule 4.17

The Fee has been calculated as shown below:

| CLAIMS           | CLAIMS REMAINING |  | HIGHEST NUMBER PREVIOUSLY PAID | NO. EXTRA CLAIMS             | RATE      | CALCULATIONS |
|------------------|------------------|--|--------------------------------|------------------------------|-----------|--------------|
| TOTAL            | 18               | MINUS  | 20                             | 0                            | x \$50 =  | \$0.00       |
| INDEPENDENT      | 1                | MINUS  | 3                              | 0                            | x \$200 = | \$0.00       |
| APPLICATION SIZE |                  | MINUS  | 100                            | 0<br>(each addtl. 50 sheets) | x \$250 = | \$0.00       |
|                  |                  | <input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS                   |                                |                              | + \$360 = | \$0.00       |
|                  |                  | TOTAL OF ABOVE CALCULATIONS  |                                |                              |           | \$0.00       |
|                  |                  | <input type="checkbox"/> Reduction by 50% for filing by Small Entity |                                |                              |           | \$0.00       |
|                  |                  | TOTAL  |                                |                              |           | \$0.00       |

- ☐ A check in the amount of \$0.00 is attached.
- ☐ Credit card payment form is attached to cover the fees in the amount of \$0.00
- ☒ Please charge any additional Fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.
- ☒ If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Norman F. Oblon

Registration No. 24,618

Customer Number

22850

Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 05/03)

Surinder Sachar

Registration No. 34,423